

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1 and 2 (Cancelled)

3 (Currently amended). A method for treating IFN- $\gamma$  and/or killer cell-susceptive tumors using gene therapy, comprising:

transforming tumor cells obtained from a subject in need thereof with a composition comprising an isolated DNA molecule that comprises a nucleotide sequence encoding the amino acid sequence of SEQ ID NO:1, where Xaa is isoleucine or threonine, and a carrier capable of introducing the isolated DNA molecule into a mammalian cell, wherein said nucleotide sequence consists of the sequence of a fragment of human genomic DNA;

proliferating the transformed tumor cells ex vivo;  
and

transplanting the proliferated transformed tumor cells into a tumor in the subject to treat the non-transformed tumor cells in the subject.

Claims 4-16 (Cancelled)

Appln.. No. 09/479,862  
Amdt. dated July 23, 2003  
Reply to Office action of March 25, 2003

17(Currently amended). A method for treating IFN- $\gamma$  and/or killer cell-susceptive tumors using gene therapy, comprising:

transforming tumor cells obtained from a subject in need thereof with an isolated DNA molecule comprising a nucleotide sequence encoding the amino acid sequence of SEQ ID NO:1, where Xaa is isoleucine or threonine, wherein said nucleotide sequence consists of the sequence of a fragment of human genomic DNA;

proliferating the transformed tumor cells ex vivo;  
and

transplanting the proliferated transformed tumor cells into a tumor in the subject to treat the non-transformed tumor cells in the subject.

18(Previously presented). The method according to claim 3, wherein the carrier is a virus or liposome.

19(Previously presented). The method according to claim 3, wherein the isolated DNA molecule is linked with a heterologous nucleotide sequence.

20(Previously presented). The method according to claim 19, wherein the heterologous nucleotide sequence is a virus vector.

21(New). In a gene therapy for treating an IFN- $\gamma$  and/or killer cell-susceptive disease, the improvement wherein a composition is used as a DNA to be introduced into (i) a subject in need thereof, (ii) an effector cell obtained from said subject, or (iii) a tumor cell obtained from said subject, said composition comprising a nucleotide sequence encoding the amino acid sequence shown in SEQ ID NO:1, where Xaa is isoleucine or threonine, and a carrier capable of introducing the isolated DNA molecule into a mammalian cell, wherein said nucleotide sequence consists of the sequence of a fragment of human genomic DNA.

22(New). In a gene therapy for treating an IFN- $\gamma$  and/or killer cell-susceptive disease, the improvement wherein an isolated DNA molecule as a DNA to be introduced into (i) a subject in need thereof, (ii) an effector cell obtained from said subject, or (iii) a tumor cell obtained from said subject, said DNA comprising a nucleotide sequence encoding the amino acid sequence shown in SEQ ID NO:1, where Xaa is isoleucine or threonine, and a carrier capable of introducing the isolated DNA molecule into a mammalian cell, wherein said nucleotide sequence consists of the sequence of a fragment of human genomic DNA.